

## PART-2 (TASK 5)

1. Write a bash script to echo your name 25 times.

[illegible]

## 2. What command should I use to display the FIRST 30 entries of syslog file?

```
suji@suji-VirtualBox:~$ head -n 30 /var/log/syslog
Jan 15 22:07:26 suji-VirtualBox rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="581" x-info="https://www.rsyslog.com"] rsyslogd was HUPed
Jan 15 22:07:26 suji-VirtualBox udisksd[585]: Failed to load the 'mdraid' libblockdev plugin
Jan 15 22:07:26 suji-VirtualBox NetworkManager[557]: <info> [1642264646.7572] Loaded device plugin: NMAtmManager (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-adsl.so)
Jan 15 22:07:26 suji-VirtualBox systemd[1]: logrotate.service: Succeeded.
Jan 15 22:07:26 suji-VirtualBox systemd[1]: Finished Rotate log files.
Jan 15 22:07:26 suji-VirtualBox ModemManager[657]: <info> ModemManager (version 1.16.6) starting in system bus...
Jan 15 22:07:26 suji-VirtualBox NetworkManager[557]: <info> [1642264646.8899] Loaded device plugin: NMWifiFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-wifi.so)
Jan 15 22:07:27 suji-VirtualBox systemd[1]: Started GNOME Display Manager.
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.5908] Loaded device plugin: NMBluezManager (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-bluetooth.so)
Jan 15 22:07:27 suji-VirtualBox systemd[1]: Received SIGRTMIN+21 from PID 304 (plymouthd).
Jan 15 22:07:27 suji-VirtualBox dbus-daemon[556]: [system] Activating via systemd: service name='org.freedesktop.Accounts' unit='accounts-daemon.service' requested by '1:19' (uid=0 pid=694 comm="/usr/sbin/gdm3" label="unconfined")
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9056] Loaded device plugin: NMTeamFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-team.so)
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9547] Loaded device plugin: NMWwanFactory (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-device-plugin-wwan.so)
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9552] manager: rfkill: Wi-Fi enabled by radio killswitch; enabled by state file
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9570] manager: rfkill: WWAN enabled by radio killswitch; enabled by state file
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9575] manager: Networking is enabled by state file
Jan 15 22:07:27 suji-VirtualBox NetworkManager[557]: <info> [1642264647.9583] dhcp-init: Using DHCP client 'internal'
Jan 15 22:07:27 suji-VirtualBox dbus-daemon[556]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org.freedesktop.nm-dispatcher.service' requested by '1:15' (uid=0 pid=557 comm="/usr/sbin/NetworkManager --no-daemon" label="unconfined")
Jan 15 22:07:27 suji-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.0503] settings: Loaded settings plugin: ifupdown (/usr/lib/x86_64-linux-gnu/NetworkManager/1.22.10/libnm-settings-plugin-ifupdown.so)
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.0504] settings: Loaded settings plugin: keyfile (internal)
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.0504] ifupdown: management mode: unmanaged
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <warn> [1642264648.0639] ifupdown: interfaces file /etc/network/interfaces doesn't exist
Jan 15 22:07:28 suji-VirtualBox dbus-daemon[556]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Jan 15 22:07:28 suji-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.1713] device (lo): carrier: link connected
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.1716] manager: (lo): new Generic device (/org/freedesktop/NetworkManager/Devices/1)
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.1736] manager: (enp0s3): new Ethernet device (/org/freedesktop/NetworkManager/Devices/2)
Jan 15 22:07:28 suji-VirtualBox NetworkManager[557]: <info> [1642264648.2804] settings: (enp0s3): created default wired connection 'Wired connection 1'
Jan 15 22:07:28 suji-VirtualBox systemd[1]: Started Disk Manager.
suji@suji-VirtualBox:~$
```

## 3. What Command should I use to display the LAST 30 entries of syslog file?

```
suji@suji-VirtualBox:~$ tail -n 30 /var/log/syslog
Feb 27 19:00:46 suji-VirtualBox systemd[787]: gnome-terminal-server.service: Succeeded.
Feb 27 19:00:46 suji-VirtualBox snapd[579]: storehelpers.go:721: cannot refresh: snap has no updates available: "bare", "core18", "core20", "gnome-3-34-1804", "gnome-3-38-2004", "gtk-common-themes", "snap-store", "snapd"
Feb 27 19:00:46 suji-VirtualBox snapd[579]: autorefresh.go:536: auto-refresh: all snaps are up-to-date
Feb 27 19:00:50 suji-VirtualBox systemd[787]: Started Application launched by gnome-shell.
Feb 27 19:00:50 suji-VirtualBox dbus-daemon[839]: [session uid=1000 pid=839] Activating via systemd: service name='org.gnome.Terminal' unit='gnome-terminal-server.service' requested by ':1.10' (uid=1000 pid=2180 comm="/usr/bin/gnome-terminal.real --window" label="unconfined")
Feb 27 19:00:50 suji-VirtualBox systemd[787]: Starting GNOME Terminal Server...
Feb 27 19:00:50 suji-VirtualBox dbus-daemon[839]: [session uid=1000 pid=839] Successfully activated service 'org.gnome.Terminal'
Feb 27 19:00:50 suji-VirtualBox systemd[787]: Started GNOME Terminal Server.
Feb 27 19:00:50 suji-VirtualBox systemd[787]: Started VTE child process 2191 launched by gnome-terminal-server process 2183.
Feb 27 19:00:50 suji-VirtualBox systemd[787]: gnome-launched-org.gnome.Terminal.desktop-2176.scope: Succeeded.
Feb 27 19:01:14 suji-VirtualBox systemd[1]: systemd-timedated.service: Succeeded.
Feb 27 19:01:55 suji-VirtualBox PackageKit: daemon quit
Feb 27 19:01:55 suji-VirtualBox systemd[1]: packagekit.service: Succeeded.
Feb 27 19:10:42 suji-VirtualBox systemd[1]: Starting Cleanup of Temporary Directories...
Feb 27 19:10:42 suji-VirtualBox systemd[1]: systemd-tmpfiles-clean.service: Succeeded.
Feb 27 19:10:42 suji-VirtualBox systemd[1]: Finished Cleanup of Temporary Directories.
Feb 27 19:17:03 suji-VirtualBox CRON[2221]: (root) CMD ( cd / && run-parts --report /etc/cron.hourly)
Feb 27 19:21:02 suji-VirtualBox NetworkManager[555]: <info> [1645969862.7671] manager: NetworkManager state is now CONNECTED_SITE
Feb 27 19:21:02 suji-VirtualBox whoopsie[718]: [19:21:02] offline
Feb 27 19:21:02 suji-VirtualBox dbus-daemon[554]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org.freedesktop.nm-dispatcher.service' requested by '1:14' (uid=0 pid=555 comm="/usr/sbin/NetworkManager --no-daemon" label="unconfined")
Feb 27 19:21:02 suji-VirtualBox systemd[1]: Starting Network Manager Script Dispatcher Service...
Feb 27 19:21:02 suji-VirtualBox dbus-daemon[554]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
Feb 27 19:21:02 suji-VirtualBox systemd[1]: Started Network Manager Script Dispatcher Service.
Feb 27 19:21:03 suji-VirtualBox NetworkManager[555]: <info> [1645969863.4067] manager: NetworkManager state is now CONNECTED_GLOBAL
Feb 27 19:21:03 suji-VirtualBox whoopsie[718]: [19:21:03] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 27 19:21:03 suji-VirtualBox whoopsie[718]: [19:21:03] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 27 19:21:03 suji-VirtualBox whoopsie[718]: [19:21:03] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnection/1
Feb 27 19:21:04 suji-VirtualBox whoopsie[718]: [19:21:04] online
Feb 27 19:21:13 suji-VirtualBox systemd[1]: NetworkManager-dispatcher.service: Succeeded.
Feb 27 19:30:01 suji-VirtualBox CRON[2245]: (root) CMD ([ -x /etc/init.d/anacron ] && if [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-rc.d anacron start >/dev/null; fi)
suji@suji-VirtualBox:~$
```

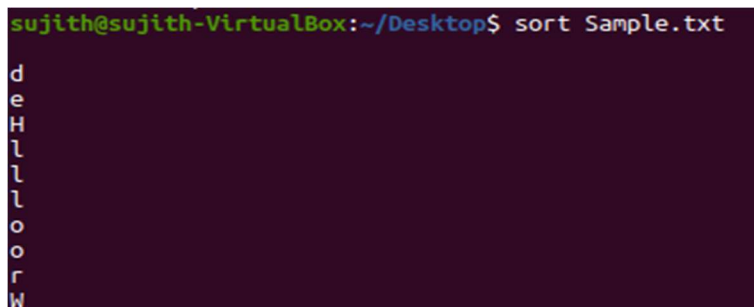
4. What command should I use to arrange the entries of a file

- We will create a text file "Sample.txt"



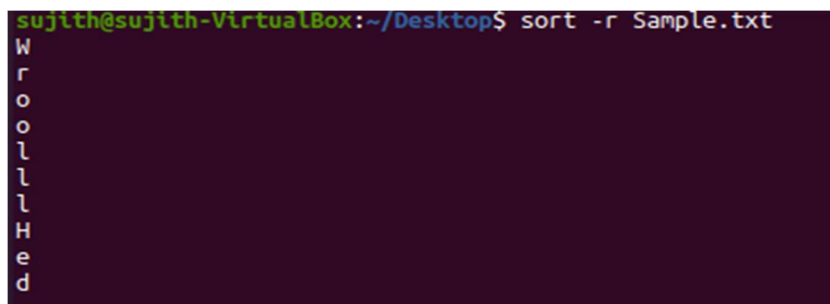
```
Open [icon] Sample.txt [Save] [Menu] [Window] [Close]
1 H
2 e
3 l
4 l
5 o
6 W
7 o
8 r
9 l
10 d
11 1
12 2
13 3
14 4
15 5
16 6
17 7
18 8
19 9
```

Alphabetically



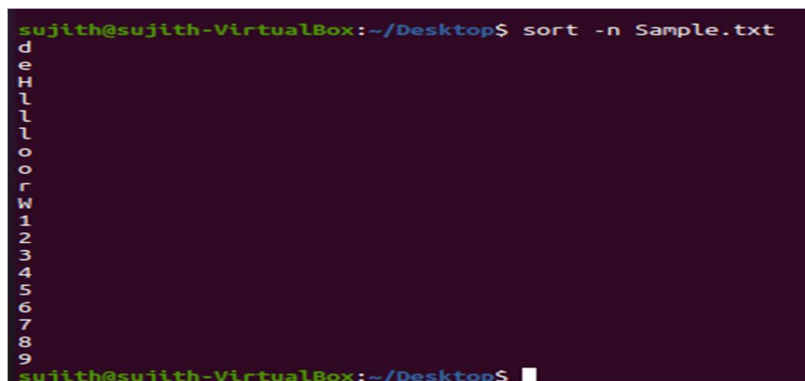
```
sujith@sujith-VirtualBox:~/Desktop$ sort Sample.txt
d
e
H
l
l
l
l
o
o
r
W
```

Reverse Order



```
sujith@sujith-VirtualBox:~/Desktop$ sort -r Sample.txt
W
r
o
o
l
l
l
l
H
e
d
```

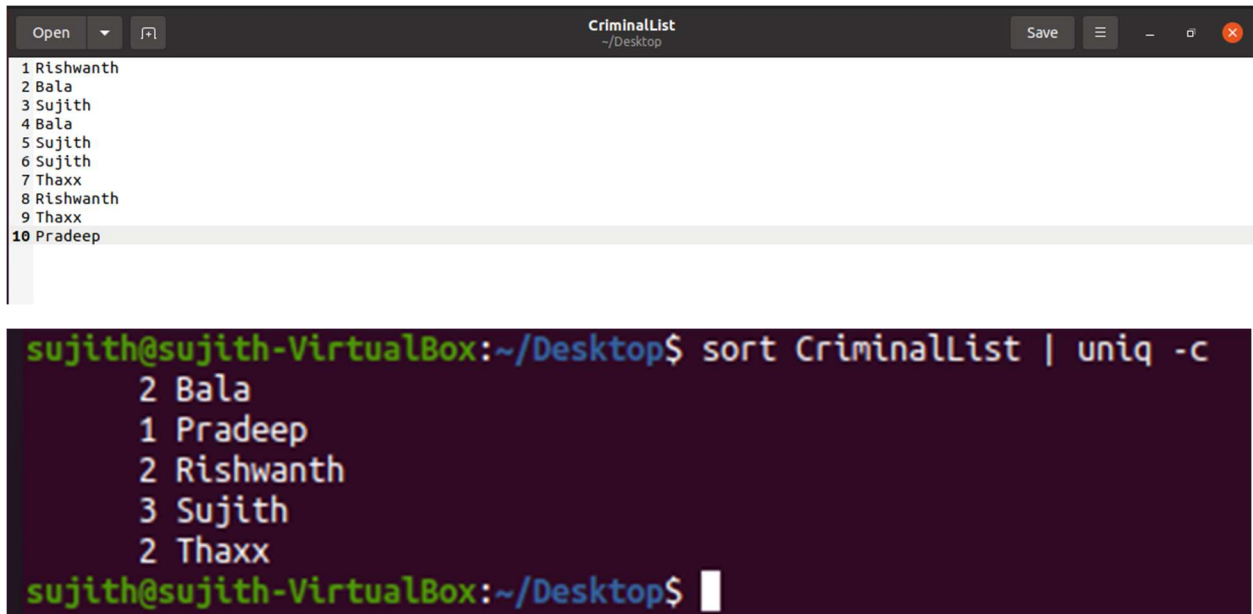
Numerical Order



```
sujith@sujith-VirtualBox:~/Desktop$ sort -n Sample.txt
d
e
H
l
l
l
l
o
o
r
W
1
2
3
4
5
6
7
8
9
sujith@sujith-VirtualBox:~/Desktop$
```

5. Copee is a Hard-Working cop. He found a case and almost at the verge of cracking it. It could be his best breakthrough. He has the list of criminals but lots of duplicates are there. He needs to find the only one that is different. He sought your help. How will you sort this issue?

- We will create a Text file "CriminalList"



The image shows two windows. The top window is a text editor titled "CriminalList" with the path "~/Desktop". It contains a list of names with line numbers: 1 Rishwanth, 2 Bala, 3 Sujith, 4 Bala, 5 Sujith, 6 Sujith, 7 Thaxx, 8 Rishwanth, 9 Thaxx, and 10 Pradeep. The bottom window is a terminal with the prompt "sujith@sujith-VirtualBox:~/Desktop\$". It shows the command "sort CriminalList | uniq -c" being executed, resulting in the following output: 2 Bala, 1 Pradeep, 2 Rishwanth, 3 Sujith, and 2 Thaxx. The terminal prompt is then "sujith@sujith-VirtualBox:~/Desktop\$".

```
Open [icon] CriminalList ~/Desktop Save [icon] [icon] [icon]
1 Rishwanth
2 Bala
3 Sujith
4 Bala
5 Sujith
6 Sujith
7 Thaxx
8 Rishwanth
9 Thaxx
10 Pradeep

sujith@sujith-VirtualBox:~/Desktop$ sort CriminalList | uniq -c
  2 Bala
  1 Pradeep
  2 Rishwanth
  3 Sujith
  2 Thaxx
sujith@sujith-VirtualBox:~/Desktop$
```

6. What are the Three parts of file's permission?

- The read permission grants the ability to read a file.
- The write permission grants the ability to modify a file
- The execute permission grants the ability to execute a file.